

Date: Wednesday, 03/06/2009 10:48:46 AM
 User: Julie Dawson

Process Sheet

Customer :	CU-DAR001 Dart Helicopters Services	Drawing Name :	SADDLE FITTING, AFT (OUTBOARD/INBOARD)
Job Number :	48354		
Estimate Number :	10533		
P.O. Number :		Part Number :	D2573
This Issue :	03/06/2009	S.O. No. :	
Prsht Rev. :	NC	Drawing Number :	D2573 REV E
First Issue :	1/1	Project Number :	N/A
Previous Run :	47566	Drawing Revision :	E
	Type :	Material :	
	MACHINED PARTS	Due Date :	30/06/2009
Written By :		Qty:	12 Um: Each
Checked & Approved By :	<u>JUL 09.06.03</u>		
Comment :	Est: 1 As Per RevE 06-01-27 JLM		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	D6101007	Saddle Billet
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 8.0000 Each(s)
 7075-T7351 8.25X7.75X2.5
 Make from D6101-007 billet for D2573
 Ensure that grain is along 7.75" length
 Batch No: 46412

2.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
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Comment: HAAS CNC VERTICAL MACHINING #1
 Program Batch No. 48354 Double check by: _____

1-Machine Step No 1 per Folio FA051 and inspect per attached Dimension Sheets
 2-Machine Step No 2 per Folio FA051 and inspect per attached Dimension Sheets
 3-Machine Step No 3 per Folio FA051 and inspect per attached Dimension Sheets
 4-Deburr and remove all machining marks
 5-Tumble to remove sharp edges.

M.A./J.L. 09/06/19

3.0	MILLING CONV.	CONVENTIONAL MILLING MACHINE
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Comment: CONVENTIONAL MILLING MACHINE
 Machine keyway as per dwg D2573 & D2574

M.A./J.L. 09/06/19

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

M.A./J.L. 09/06/19

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 03/06/2009 10:48:47 AM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SADDLE FITTING, AFT (OUTBOARD/INBOARD)

Job Number: 48354

Part Number: D2573

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC8

SECOND CHECK



(13)

Comment: SECOND CHECK

MF 09-06-19

6.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



(X13)

Comment: HAND FINISHING RESOURCE #1

Acid etch and Alodine as per QSI 005 4.1

Uma 09/06/22

7.0

POWDER COATING

POWDER COATING



MA 11472

Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

START TIME:

10:15am

OVEN TEMPERATURE:

320°F

FINISH TIME:

10:45am

MF 09-06-22 (X13)

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



U 8/06/22

Comment: INSPECT POWDER COAT

9.0

PACKAGING 1

PACKAGING RESOURCE #1



(13)

Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 434

9/10/22

Sc

10.0

QC21

FINAL INSPECTION/W/O RELEASE



09/06/23

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



MF 09-06-22

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order: 48354
Description: Saddle, Aft Outboard	Part Number: D2573
Inspection Dwg: D2573 Rev. E	Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2573 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.438	0.443		0.440	0.440	0.440	0.440		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.002	8.002	8.000	8.000		
F	0.490	0.510		0.505	0.498	.503	.501		
G	0.257	0.262		0.260	0.260	0.260	0.260		
H	0.375	0.380		0.377	0.377	0.377	0.377		
I	0.490	0.510		0.497	0.498	.501	.501		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		0.567	0.567	.567	.568		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.365	1.375		1.370	1.370	1.370	1.370		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	4.119	4.129		4.124	4.124	4.124	4.124		
P	0.115	0.135		0.126	0.126	.125	.125		
Q	0.115	0.135		0.135	0.135	0.135	0.135		
R	0.240	0.260		0.251	0.251	.251	.250		
S	0.115	0.135		0.126	0.126	.125	.124		
T	0.178	0.198		0.188	0.188	0.188	0.188		
U	3.210	3.250		3.230	3.230	3.230	3.230		
V	0.230	0.250		0.240	0.238	.237	.238		
W	0.115	0.135		0.126	0.126	.124	.126		
X	0.308	0.313		.311	.311	.311	.311		
Y	0.760	0.765		.760	.760	.760	.760		
Z	0.352	0.372		0.356	0.359	.363	.364		
AA	0.470	0.530		0.500	0.500	0.500	0.500		
AB	0.615	0.635		0.635	0.628	.627	.630		
AC	0.053	0.073		0.063	0.063	0.063	0.063		
AD	0.240	0.260		0.247	0.245	.245	.244		
AE	1.500	1.520		1.5138	1.5144	1.5145	1.514		
AF	0.115	0.135		0.135	0.135	.125	.125		
AG	0.240	0.280		0.265	0.265	0.265	0.265		
AH	0.240	0.260		0.248	0.248	.248	.249		
AI	2.000	2.020		2.0016	2.0022	2.0025	2.0023		
AJ	0.023	0.043		0.033	0.033	0.033	0.033		
Accept/Reject									

Measured by: H. A
Date: 09/06/17

Audited by: [Signature]
Date: 09.06.17

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.26	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

DART AEROSPACE LTD		Work Order: 48354
Description: Saddle, Aft Outboard		Part Number: D2573
Inspection Dwg: D2573 Rev. E		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2573 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	15	16	17	18	By	Date
A	0.438	0.443		.440	.440	.440	.440		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.000	8.000	8.000	8.001		
F	0.490	0.510		.490	.500	.502	.501		
G	0.257	0.262		.259	.259	.259	.259		
H	0.375	0.380		.376	.376	.376	.376		
I	0.490	0.510		.501	.500	.501	.500		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		.567	.568	.568	.568		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.365	1.375		1.370	1.370	1.370	1.370		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	4.119	4.129		4.124	4.124	4.124	4.124		
P	0.115	0.135		.126	.125	.125	.125		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.250	.250	.250	.250		
S	0.115	0.135		.120	.125	.125	.124		
T	0.178	0.198		.188	.188	.188	.188		
U	3.210	3.250		3.230	3.230	3.230	3.230		
V	0.230	0.250		.238	.239	.239	.239		
W	0.115	0.135		.125	.127	.125	.124		
X	0.308	0.313		.311	.311	.311	.311		
Y	0.760	0.765		.760	.760	.760	.760		
Z	0.352	0.372		.361	.362	.360	.360		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.626	.627	.625	.626		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.245	.248	.247	.246		
AE	1.500	1.520		1.515	1.514	1.515	1.515		
AF	0.115	0.135		.130	.130	.130	.130		
AG	0.240	0.280		.265	.265	.265	.265		
AH	0.240	0.260		.247	.250	.251	.248		
AI	2.000	2.020		2.003	2.002	2.002	2.004		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by:	JL
Date:	09/06/18

Audited by:	NA
Date:	09.06.19

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.26	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

DART AEROSPACE LTD	Work Order: 48354
Description: Saddle, Aft Outboard	Part Number: D2573
Inspection Dwg: D2573 Rev. E	Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2573 Rev. E and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				9	10	11	12		
A	0.438	0.443		.440	.440	.440	.440		.440
B	1.745	1.755		1.750	1.750	1.750	1.750		1.750
C	3.495	3.505		3.500	3.500	3.500	3.500		3.500
D	1.745	1.755		1.750	1.750	1.750	1.750		1.750
E	7.990	8.010		8.000	8.001	8.000	8.000		8.000
F	0.490	0.510		.500	.500	.499	.498		.499
G	0.257	0.262		.259	.259	.259	.259		.259
H	0.375	0.380		.376	.376	.376	.376		.376
I	0.490	0.510		.500	.501	.501	.501		.499
J	1.174	1.184		1.179	1.179	1.179	1.179		1.179
K	0.558	0.578		.568	.569	.569	.569		.567
L	1.174	1.184		1.179	1.179	1.179	1.179		1.179
M	1.365	1.375		1.370	1.370	1.370	1.370		1.370
N	2.495	2.505		2.500	2.500	2.500	2.500		2.500
O	4.119	4.129		4.124	4.124	4.124	4.124		4.124
P	0.115	0.135		.125	.125	.125	.125		.125
Q	0.115	0.135		.135	.135	.135	.135		.135
R	0.240	0.260		.250	.251	.250	.250		.250
S	0.115	0.135		.125	.122	.127	.128		.126
T	0.178	0.198		.188	.188	.188	.188		.188
U	3.210	3.250		3.230	3.230	3.230	3.230		3.230
V	0.230	0.250		.240	.237	.238	.238		.240
W	0.115	0.135		.126	.124	.126	.127		.128
X	0.308	0.313		.311	.311	.311	.311		.311
Y	0.760	0.765		.760	.760	.760	.760		.760
Z	0.352	0.372		.361	.364	.362	.361		.361
AA	0.470	0.530		.500	.500	.500	.500		.500
AB	0.615	0.635		.628	.627	.625	.627		.627
AC	0.053	0.073		.063	.063	.063	.063		.063
AD	0.240	0.260		.245	.245	.244	.245		.244
AE	1.500	1.520		1.514	1.515	1.514	1.515		1.515
AF	0.115	0.135		.130	.130	.130	.130		.130
AG	0.240	0.280		.251	.265	.265	.265		.265
AH	0.240	0.260		.245	.250	.249	.249		.250
AI	2.000	2.020		2.003	2.003	2.002	2.003		2.003
AJ	0.023	0.043		.033	.033	.033	.033		.033
Accept/Reject									






Measured by:	JL
Date:	09/06/19



Audited by:	AD
Date:	09.06.19

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.26	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

05.12.06

MATERIAL: 7075-T7351 (QQ-A-250/12)
(REF DART SPEC. D6102-001)
FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER
DART QSI 005 4.3
BREAK ALL SHARP EDGES 0.010 TO 0.020
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

- | | |
|---|--|
|  | ENGRAVE PART AND BATCH NUMBER IN THIS AREA TO MAX DEPTH OF 0.010 |
|  | ENGRAVE DART LOGO TO MAX DEPTH OF 0.015 WITH MIN RAD 0.125 |
|  | CHAMFER 0.063" x 45° AROUND THIS SURFACE (TYPICAL 2 PLACES) |
|  | CHAMFER 0.063" x 45° ALL AROUND |
|  | CHAMFER 0.033" x 45° (SEE DETAIL C) |
-

E	05.07.13	ADD CHAMFER ON RIDGE NOTE 5	
D	02.09.06	ADD RIDGES; TIGHTEN TOLERANCES	
C	99.10.22	INCORP. DEO 9123/9079/9102 ADD DIMENSIONS PER TSR A1177	
B	96.12.02	ADD GRAIN DIR., 0.438 WAS 0.425	
A	96.09.16	NEW ISSUE	
DESIGN		DRAWN BY	
DS		PH	
CHECKED 		APPROVED 	
DATE		DRAWING NO.	REV.
05.07.13		D2573	SHEET 1 OF 2
		TITLE	SCALE
		OUTER AFT SADDLE	2:

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Technical drawing of a mechanical part, likely a manifold or flange, showing dimensions and features.

Dimensions and Tolerances:

- Overall width: 4.000
- Top horizontal segments: 1.370 \pm 0.005, 4.124 \pm 0.005
- Top vertical segments: 0.568, 0.500
- Inner vertical segments: 1.179 \pm 0.005, 2.500 \pm 0.005
- Bottom horizontal segments: 1.370 \pm 0.005, 0.25 \pm 0.005
- Bottom vertical segments: 0.125, 0.125
- Overall height: 0.500

Geometric Features:

- Radii: R0.57 (TYP), R0.75 (TYP), R0.50 (TYP), R0.38 (TYP)
- Hole diameters: $\phi 0.375^{+0.005}_{-0.000}$ (TYP 2 PLACES), $\phi 0.750$ (TYP), $\phi 0.257^{+0.005}_{-0.000}$ (TYP 8 PLACES), $\phi 0.510$ MIN FLAT AROUND ALL HOLES
- Grain Direction: Indicated by an arrow pointing upwards.
- Detail Callout: DETAIL C (bottom right)

Technical drawing of a cross-section of a mechanical part, likely a valve or fitting. The drawing shows a semi-circular profile with various dimensions and tolerances. Key features include a top horizontal edge with a width of 3.230 ± 0.020 , a top radius of $R0.50$ (TYP), and a bottom radius of $R1.510$. The part has a flat top surface of 0.240 on the right side. Dimensions for the base and internal features are also provided, including 0.125 , 0.250 , 0.063 , and 1.698 (REF). The drawing includes a section line and a reference line.

0.060

5
(TYP)

DETAIL C
SCALE 4:3

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WORK SHEET
48384
N1